





#### State Water Resources Control Board

Division of Drinking Water

May 1, 2017

Russ Dingman, Superintendent Park Maintenance Division, California State Parks Department 15101 Lancaster Road Lancaster, CA 93536

Dear Mr. Dingman:

CITATION NO. 03\_19\_17C\_016 ISSUED TO THE RED ROCK CANYON STATE PARK (WATER SYSTEM No. 1510300) FOR VIOLATION OF SURFACE WATER TREATMENT RULE — TURBIDITY FOR THE MONTHS OCTOBER 2016 THROUGH MARCH 2017

The Division of Drinking Water of the State Water Resources Control Board (hereinafter State Board) has issued Citation No. 03\_19\_17C\_016 for a filtration operations violation from October 2016 through March 2017, for the California State Parks Department (CSP) - Red Rock Canyon State Park Water System (hereinafter Water System). This violation demonstrated noncompliance of the Water System with the Surface Water Treatment Rule, Section 64653 c(2), Title 22, California Code of Regulations. As required in the enclosed Citation, the State Board expects the California State Parks Department (CSP-Red Rock) to make operational improvements to its surface water treatment plant. The purpose of these improvements is to stay in compliance with the regulations of the Surface Water Treatment Rule, including turbidity performance standards, and deliver water that is safe.

The CSP-Red Rock has been billed at the State Board's hourly rate (currently estimated at \$161.00) for the time spent (1.5 hours) on issuing the enclosed Citation. The California Health and Safety Code, Section 116577, provides that a public water system must reimburse the State Board for actual costs incurred for specified enforcement actions, including but not limited to preparing, issuing and monitoring compliance with citation directives.

If you have any questions regarding this matter, please contact Dr. AbdelRahman Shurbaji, Ph.D., P.E., at (661) 335-7317 or me via phone at (661) 335-7318 or by email at Jesse.Dhaliwal@waterboards.ca.gov.

Sincerely

ฮaswinder S. Dhัลli้wal, P.E.

Senior Sanitary Engineer, Tehachapi District

DIVISION OF DRINKING WATER

Enclosure:

Citation No. 03\_19\_17C\_016

CC:

Kern County Dept. of Public Health, Environmental Health Services Division Carl Carlucci, P.E., Regional Engineer, Central California Section, SWRCB-DDW William Traxler, Chief Water Treatment Operator, CSP-Red Rock (via email)

JSD:ams (Cover Ltr-040717-Citation1510300 Turbidity)

State Park, for failure to comply with pursuant to Section 116555 (a)(1) of the CHSC and Section 64653 c(2) of Title 22, California Code of Regulations (hereinafter "CCR"). Specifically, the CSP-Red Rock failed to comply with the turbidity standard (0.3 NTU) in 95% of the measurements taken during the months of October 2016 through March 2017.

## **APPLICABLE AUTHORITIES**

A copy of the Applicable Statues and Regulations is located in **Attachment A**, which is attached hereto and incorporated by reference.

### STATEMENT OF FACTS

The CSP-Red Rock's domestic water supply system is classified as a transient non-community water system. It serves 12 service connections and a daily population of approximately 400. The CSP-Red Rock utilizes raw surface water from the Los Angeles Owens Valley Aqueduct, through a 2-mile transmission line, as its source of water supply. The CSP-Red Rock treats raw surface water in its Surface Water Treatment (SWT) Plant, in accordance with its Domestic Water Supply Permit No. 03-12-96P-008 (Permit) dated 1996. Permit Provision No. 2, about surface water treatment operational requirements, specifies the flow rates for the filters as 3 gallons per minute (gpm) per square foot of filter area, making the flow capacity 9.4 gpm per filter or 37.7 gpm for all four filters. The SWT Plant is described as an inline filtration plant with the following processes: pre-chlorination, polymer coagulation, clarification, pressure filtration and chlorine disinfection. The SWT Plant's site has no electricity; solar panels charge a battery that runs certain devices for monitoring turbidity and chlorine residual. Flow from the three treated water storage tanks to the distribution system is by gravity.

The 1996 Permit did not specify the turbidity performance standard for the SWT Plant. Moreover, the Operations and Monitoring (O&M) Plan, dated November 16, 1993, did not specify treatment performance goals for turbidity. The State Board issued a letter of sanitary survey findings, dated July 9, 2013, in which it specified the applicable SWTR turbidity standard to be met at the effluent of the SWT Plant. The turbidity level of the SWT Plant's effluent is expected to be equal to or less than 0.3 Nephelometric Turbidity Unit (NTU) in 95% of the measurements taken each month. The July 2013 letter listed other operational requirements for the SWT Plant and stated that the turbidity standard was not met during several months in previous years, and as shown in Table 1 below, the SWT Plant has continued to experience problems with turbidity compliance. The State Board staff inspected the SWT Plant again on January 14, 2015, to check on the improvements made to the SWT Plant. No citations or compliance order were issued for the previous violations of the turbidity standard. This Citation documents the violation of turbidity performance standard for the months of October 2016 through March 2017.

**Table 1. Turbidity Violation Records** 

Month	Turbidity 95 <sup>th</sup> percentile Filter Effluent Turbidity (NTU)	Percentage of Readings less than 0.3 NTU  (must be => 95%) (%)	Peak Raw Water Turbidity (NTU)
November 2013	0.31	93	3.9
September 2014	1.04	18	7.8
October 2014	0.66	67	7.8
December 2014	0.73	81	5.7

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Month	Turbidity 95 <sup>th</sup> percentile Filter Effluent Turbidity (NTU)	Percentage of Readings less than 0.3 NTU  (must be => 95%)	Peak Raw Water Turbidity (NTU)
October 2016	0.57	86	6.2
November 2016	0.34	76	5.8
December 2016	0.52	80	10.0
January 2017	0.93	38	10
February 2017	1.27	50	4.4
March 2017	1.48	57	6.2

In conference calls, site visit in March 2017 and emails, the State Board discussed with the CSP-Red Rock's Superintendent and operator(s) the turbidity performance violations since October 2016. Based on the State Board's records, the CSP-Red Rock's SWT Plant has indeed exceeded 1.0 NTU in February 2017 and March 2017, but these exceedances did not take place in more than two consecutive samples (more than 8 hours of monitoring).

#### **DETERMINATIONS**

Based on the above Statement of Facts, the State Board has determined that the CSP-Red Rock has violated CHSC, Section 116555 (a)(1) of the CHSC and Section 64653 c(2) of Title 22, CCR in that water delivered by the SWT Plant, during the months of October 2016 through March 2017, did not comply with the applicable turbidity performance standard.

The State Board became aware of these recent violations when the Monthly Summary Report for the SWT Plant was received. The CSP-Red Rock has also failed in many months to provide turbidity reduction, required to indicate adequate removal of 2.5-log for Giardia lamblia cysts, 2.0-log for viruses and 1.0-log for Cryptosporidium.

Section 64664(e) requires the CSP-Red Rock to notify the State Board of any violation of performance standards. The State Board staff reviewed the reports and determined that there were violations of the turbidity performance standard during the months of October 2016 through March 2017. It is noted that the monthly turbidity summary reports do not include any explanation for violation of the turbidity performance standard. Section 64666(a) requires a public water system using surface water to notify its consumers whenever there is a failure to comply with the treatment requirements specified in Section 64653. A template for providing public notification for violation of this section of the Surface Water Treatment Rule (SWTR) is included in **Attachment B**. Proof of Public Notification (**Attachment C**) must be submitted to the State Board within ten (10) days of disseminating the public notification. The CSP-Red Rock must post the notice for all visitors to the state park at places of water use (water fountains, bathrooms, etc.) and distribute a copy of the public notice to the employees. The notice shall remain in effect until the State Board issues a cancellation notice.

### **DIRECTIVES**

To ensure that the water supplied by the CSP-Red Rock is at all times safe, wholesome, healthful, and potable, and pursuant to the California Safe Drinking Water Act (SDWA), the CSP-Red Rock is hereby directed to take the following actions:

1. The CSP-Red Rock shall submit a written report to the State Board by May 31, 2017, describing:

- (a) the cause of the failure(s) to provide adequate pathogen turbidity removal, as measured using the 95th percentile, and any corrective actions taken, and
- (b) any necessary operational changes that will be made to prevent future turbidity failures. Since the failure happened several times including in previous years, the CSP-Red Rock shall submit for State Board's approval (i) a Corrective Action Plan identifying needed improvements to the water treatment system, and (ii) an updated Operations and Maintenance Plan reflecting the current operation of the SWT Plant.
- 2. The CSP-Red Rock shall provide public notification to all persons served by its water system, of the turbidity treatment technique violation, in conformance with Section 64463.4 and Section 64465, Title 22, of the CCR. The notice must be posted by May 5, 2017, and it shall inform the reader that water delivered did not meet the filtration treatment requirements of the SWTR during the months of October 2016 through March 2017. A template for providing the public notification is included in Attachment B. The public notice shall remain in effect until the State Board issues a cancellation notice.
- 3. The CSP-Red Rock shall provide proof of publication of the notification to the State Board by May 15, 2017. A copy of this form is included in **Attachment C**.
- 4. The State Board reserves the right to make such modifications to this Citation, as it deems necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation and shall be effective upon issuance.

5. All submittals required by this Citation shall be addressed to:

Jaswinder S. Dhaliwal, P.E., Senior Sanitary Engineer State Water Resources Control Board Division of Drinking Water, Tehachapi District 4925 Commerce Drive, Suite 120 Bakersfield, California 93309

#### **PARTIES BOUND**

This Citation shall apply to and be binding upon the CSP-Red Rock, officers, directors, agents, employees, contractors, successors, and assignees.

#### **SEVERABILITY**

The Directives of this Citation are severable, and the CSP-Red Rock shall comply with each and every directive thereof, notwithstanding the effectiveness of any other directive.

#### **FURTHER ENFORCEMENT ACTION**

The California SDWA authorizes the State Board to issue citations and/or compliance orders with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any regulation, permit, standard, citation, or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the State Board to take action to suspend or revoke a permit that has been issued to a public water system if the public water system has violated applicable law or regulations or has failed to comply with a citation directive, and to petition the superior court to take various enforcement

measures against a public water system that has failed to comply with a citation or order of the State Board. The State Board does not waive any further enforcement action by issuance of this citation. Section 116650, subsections (d) and (e) of the CHSC allow for the assessment of a civil penalty for failure to comply with the requirements of the Safe Drinking Water Act. Failure to comply with any provision of this Citation may result in the State Board imposing an administrative penalty in an amount not to exceed \$1,000 (one thousand dollars) per day as of the date of violation of any provision of this Citation.

Senior Sanitary Engineer

**DIVISION OF DRINKING WATER** 

CERTIFIED MAIL NO. 7015 1520 0000 4433 1778

# **ATTACHMENTS:**

Attachment A: Applicable Statutes and Regulations

Attachment B: **Public Notification Template** 

Attachment C: Proof of Notification

CC: Kern County Dept. of Public Health, Env. Health Services Division (w/o attachments) William Traxler, Chief Water Treatment Operator, CSP-Red Rock (via email)

#### Attachment A

## Applicable Statues and Regulations for Citation No. 03\_19\_17C\_016

# Section 116555, California SDWA, states in relevant part: §116555. Operational Requirements.

- (a) Any person who owns a public water system shall ensure that the system does all of the following:
- (1) Complies with primary and secondary drinking water standards.
- (2) Will not be subject to backflow under normal operating conditions.
- (3) Provides a reliable and adequate supply of pure, wholesome, healthful, and potable water.
- (4) Employs or utilizes only water treatment operators or water treatment operators-intraining that have been certified by the department at the appropriate grade.
- (5) Complies with the operator certification program established pursuant to Chapter 4 (commencing with Section 106875).

# Section 116650, California SDWA, states in relevant part: §116650. Citations.

- (a) If the State Board determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the State Board may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
- (b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
- (c) A citation may specify a date for elimination or correction of the condition constituting the violation.
- (d) A citation may include the assessment of a penalty as specified in subdivision (e).
- (e) The State Board may assess a penalty in an amount not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation.

# Section 64653 of Title 22, California Code of Regulations (CCR) states in relevant part: §64653. Filtration.

- (a) All approved surface water utilized by a supplier shall be treated using one of the following filtration technologies unless an alternative process has been approved by the State Board pursuant to subsections (e), (f), (g) and (h):
- (1) Conventional filtration treatment;

- (2) Direct filtration treatment:
- (3) Diatomaceous earth filtration; or
- (4) Slow sand filtration.
- (b) Conventional filtration treatment shall be deemed to be capable of achieving at least 99.7 percent removal of *Giardia lamblia* cysts, 99 percent removal of viruses, and 99 percent removal of *Cryptosporidium* when in compliance with operating criteria specified in section 64660 and performance standards specified in table 64653. Direct filtration treatment, diatomaceous earth filtration, and slow sand filtration shall be deemed to be capable of achieving at least 99 percent removal of *Giardia lamblia* cysts, 90 percent removal of viruses, and 99 percent removal of *Cryptosporidium* when in compliance with operating criteria specified in section 64660 and performance standards specified in table 64653.
- (c) A supplier shall comply with the combined filter effluent turbidity performance standards in table 64653 for each treatment plant while the plant is in operation:

Table 64653
Combined Filter Effluent Turbidity Performance Standards (a)

If a supplier uses	The turbidity level of the combined filter effluent
( 1) Conventional or direct filtration treatment and serves 10,000 or more persons	(A) Shall be less than or equal to 0.3 NTU in at least 95 percent of the measurements taken each month; (B) Shall not exceed 1 NTU for more than one continuous hour; (C) Shall not exceed 1 NTU at four-hour intervals; and (D) Shall not exceed 1.0 NTU for more than eight consecutive hours.
(2) Conventional or direct filtration treatment and serves fewer than 10,000 persons	(A) Shall be less than or equal to 0.3 NTU in at least 95 percent of the measurements taken each month; (B) For a supplier using a grab sample monitoring program: 1. Shall not exceed 1 NTU; and 2. Shall not exceed 1.0 NTU in more than two consecutive samples; and

## IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene informacion muy importante sobre su agua potable.

Traduzcalo o hable con alguien que lo entienda bien.

# California State Parks Dept. - Red Rock Canyon State Park Did Not Meet Treatment Requirement (Turbidity)

Our water system recently failed a drinking water standard. Although this is not an emergency as our customers, you have a right to know what you should do, what happened, and what we did to correct this situation.

We routinely monitor your water for turbidity (cloudiness) which tells us whether we are effectively filtering the water supply. Water samples for October, November, December 2016, January, February and March 2017 showed that 86%, 76%, 80%, 38%, 50% and 57% of turbidity measurements taken during the month were below 0.3 turbidity units (NTU), respectively. The standard is that at least 95 percent of samples may be below 0.3 NTU per month. The turbidity levels being persistent above 0.3 NTU is a concern.

#### What should I do?

- You do not need to boil your water or take other actions.
- This is not an emergency. If it had been you would have been notified immediately. We do not know of any contamination, and none of our testing has shown disease-causing organisms in the drinking water.
- Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. These symptoms are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.
- People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1 (800) 426-4791.
- If you have other health issues concerning the consumption of the water, you may wish to consult
  your doctor.

#### What happened? What was done?

The turbidity violation may be caused by inadequate treatment plant operation and/or design. We are working with the State Water Resources Control Board, Division of Drinking Water and taking steps to achieve compliance.

For more information, please contact William Traxler, Chief Water Treatment Plant Operator at (661) 724-1184 or via mail: California State Parks Dept., 15101 Lancaster Road, Lancaster, CA 93536.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by CSP - Red Canyon State Park.

State Water System ID#:	1510300. Date distributed:	
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# Certification of Completion of Public Notification (Include a Copy of the Public Notice When Submitting this Form)

This form, when completed and returned to the State Water Resources Control Board, Division of Drinking Water – Tehachapi District (4925 Commerce Drive, Suite 120, Bakersfield, CA 93309 or fax to 661-335-7316 or email to dwpdist19@waterboards.ca.gov, serves as certification that public notification to water users was completed as required by Title 22, California Code of Regulations, Sections 64463-64465.

Public	c Water Sys	stem Name:	CSP – Red Rock Canyon State Park
Public	c Water Sys	stem No.:	1510300
Public	notification	for failure to co	mply with the Surface Water Treatment Rule (Turbidity Performance
Stand	lard of 0.3 l	NTU) for the mo	nths of October 2016 to March 2017
was p	erformed by	the following mo	ethod(s) (check and complete those that apply):
	The notice		sers on: otice is attached.
	The notice		ered to water customers on:  otice is attached.
	The notice		n the local newspaper on:ewspaper notice is attached.
	The notice	A copy of the no	onspicuous places on: onspicuous places on: onspicuous places on: s the notice was posted is attached.
	The notice	A copy of the no	o community organizations on: otice is attached. nity organizations the notice was delivered to is attached.
I here	by certify tha	at the above info	rmation is factual.
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			Title
			Signature
			Date

**Disclosure:** Be advised that Section 116725 and 116730 of the California Health and Safety Code state that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the attached order may be liable for a civil penalty not to exceed five thousand dollars (\$5,000) for separate violation each day that the violation continues. In addition, the violators may be prosecuted in criminal court and, upon conviction, be punished by a fine of not more than \$25,000 for each day of violation, or be imprisoned in the county jail not to exceed one year, or by both the fine and imprisonment.

Due to the State Board, Division of Drinking Water within 10 days of issuance of notice to customers & no later than May 15, 2017